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ORNAMENTAL WOODY PLANTS ATTRACTIVE TO BIRDS

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Man's steady encroachment upon the natural haunts of wild birds has forced many of them to seek food and shelter elsewhere. To offset to some extent the effects of this necessary economic use of the wildlife domain, the Federal Government, through the Bureau of Biological Survey, is establishing refuges throughout the country that will restore and maintain habitats where the birds can breed with a minimum of hazard and reestablish themselves in abundance. In addition, it administers the Migratory Bird Treaty Act of 1916, which protects most migratory birds. Based on scientific research, the Biological Survey also offers specific recommendations to organizations and individuals for increasing bird populations. Local communities and State agencies have done much to foster the care and protection of birds and have established refuges and sanctuaries for them. (Suggestions for the development of small bird refuges are contained in U. S. Dept. Agr. Farmers' Bulletin 1644, "Local Bird Refuges," prepared by the Biological Survey.)

Individuals and small organizations, too, can render untold assistance in befriending birds by furnishing havens that provide shelter and a variety of food throughout the year. Most persons who have land around their homes are interested in beautifying it with flowers, trees, shrubs, vines, and the like, and these people realize also that the presence of birds on their premises unquestionably lends additional beauty. Planting shrubs, trees, and vines that offer an abundance of food and cover throughout the year will do more to attract birds to lawns, yards, and homes than will any other effort in their behalf. The past few decades have witnessed a growing appreciation of bird life in its economic and esthetic aspects. The economic value of birds has long been recognized, particularly in their destruction of injurious insects. Even those who are not bird students sense the esthetic values of beautiful song, brilliant plumage, delicate form, and graceful flight. Birds are not only beautiful in themselves but they help to maintain the beauty of our ornamental shrubs, trees, and vines by feeding on destructive insects.

For more than a half century the Biological Survey has been carrying on investigations on the food habits of birds, and it has built up a file containing information on their food preferences, on the species that eat various types of foods, and on the significance of birds as valuable allies of the farmer, horticulturist, and forester. Some of the results of these studies have been published as recommendations for planting various trees, shrubs, and herbs as sources of food for birds. (Biological Survey Leaflets BS-41 to BS-50, inclusive, "Fruits Attractive to Birds.")

Frequently there is a dual desire on the part of farmers, home owners, civic and garden clubs, and community planning bodies to utilize ornamental plantings that have value also in attracting birds. This is reflected in the growing tendency among nurserymen to recommend bird-food plantings and to stress the beauty and good cheer that birds add to home grounds.

In planting to attract desirable birds it is to be remembered that they will invariably frequent areas where ample food is available throughout the year and where there is sufficient cover for nesting and for protection from enemies. The selection of plants should be made discriminately, so that they will not only add to the beauty of the premises, but will also provide sufficient food and cover for birds. It is better to plant more than one kind of shrub, tree, or vine, as monotonous planting may result in sparse avian populations and lack beauty. The great variety of ornamental plants on the market makes possible a diverse choice and insures a supply of flowers and fruits during all seasons. With an overlapping of several species, a well-planted area continually produces new flowers and fruits as the old ones disappear. Shrubs, trees, and vines should be planted for summer flowering and for autumn fruiting, and several should be chosen that will develop fruits that persist through the winter. W. L. McAtee (U. S. Dept. Agriculture Year-book 1909, pp. 187-188) states that "a thicket of raspberry or dewberry, elder, and dogwood, grouped about some taller sumac, Juneberry, and juniper, would supply fruit throughout the year" for birds.

Gayly colored berries and bright branches are attractive against a snowy background and will provide food for many of the birds that remain during the colder months. Evergreens are almost indispensable in attracting birds in winter, as they offer food to some extent as well as protection from wind and cold. In fact, they are essential for a well-balanced planting program. It is recommended that native species be planted in preference to introduced varieties.

To safeguard a sanctuary against enemies of birds, mass planting of shrubs is invaluable. A thick, thorny hedge is more ornamental than an iron, wooden, or stone fence, and assures birds of certain protection from many, and possible protection from others, of their natural enemies. A hedge also provides many nesting places and gives protection to eggs and birds. In general, mass planting is of greater value than individual plantings in attracting and protecting birds.

To induce a variety of birds to visit or inhabit the home grounds, provender for all should be supplied--conifers and other seed-bearing plants for pine siskins, goldfinches, crossbills, redpolls, and other seed-

eating species; and apple, bayberry, snowberry, and scores of other fruit-producing plants for the fruit-eating species, as robins, cardinals, mockingbirds, bluebirds, and many others (Conservation Bulletin 1, "Attracting Birds," obtainable from the Biological Survey). The fruits, berries, and seeds of wild plants are more relished by birds than are those of domesticated varieties, and planting a large number of wild species therefore helps to protect those that are cultivated.

In this paper are listed and briefly discussed some of the more common shrubs, trees, and vines both as to their ornamental value about the home and as to their value from the food and cover standpoint for attracting desirable birds. No attempt is made to offer suggestions for landscaping, and little description is given of the plants listed. (Hints on landscaping may be obtained from U. S. Dept. Agr. Farmers' Bull. 1067, "Beautifying the Farmstead.") Nurserymen can offer helpful advice on the suitability of the plants listed for specific regions or can suggest similar horticultural or wild varieties. Propagating stock can usually be obtained from reliable nurseries. From these organizations also information can usually be obtained as to suitable varieties, their possibilities for growth, range, habitat requirements, and the like. These data are therefore not included in this paper. The United States Bureau of Plant Industry maintains a file of addresses and catalogs of several thousand nurseries throughout the United States.

ANNOTATED LIST OF SELECTED ORNAMENTAL PLANTS

The ornamental plants here discussed are listed in the alphabetical order of their most commonly used names. Under each is a brief discussion of its general decorative character and a list of the more common birds that feed on it. These birds are named in the order of their importance as consumers of the plant. If a species is relatively rare or does not respond readily to attraction it has not been included. At the end of each discussion are enumerated alphabetically the related species of plants utilized as food by birds. The statements are based entirely upon Biological Survey records obtained during the course of stomach and crop examinations and not on field observations of birds' feeding. In general, it may be assumed that the plants mentioned have decorative value, though only an occasional brief comment is made concerning their ornamental character, abundance of fruit, seasonal availability, or other desirable features. The fact that a bird is listed first does not necessarily mean that it is equal in importance to the birds listed first for other plants. Other birds, both desirable and undesirable, also feed upon the plants, but because of insufficient data, many are not listed. Since the bobwhite, ruffed grouse, and other game birds are not ordinarily found in urban communities, although they might feed near homes adjacent to fields or wooded areas, they are not included. The starling, English sparrow, and other species not usually wanted about home grounds are not mentioned. These birds are considered obnoxious, however, only when occurring in large numbers and they will be attracted to homes that make food and cover available through plantings. In the main, however, the majority of

birds attracted will be of desirable species. ^{1/} Inclusion of a genus or species does not necessarily mean that it can be successfully cultivated in all areas.

Alder

The records of redpolls' feeding on alder (Alnus: Betulaceae), which produces fruits from late summer well into the winter, lead those of all other birds. In all, 23 kinds of birds are fond of this plant, the 4 most important being the common redpoll, pine siskin, Hornemann's redpoll, and tree sparrow.

Species utilized: A. alnobetula, A. incana, and A. oregona.

Apple

Although apple (Malus: Rosaceae) trees are not so ornamental as some of our other trees and shrubs, except when in bloom, they offer a good source of food for many familiar birds, especially for members of the woodpecker family. Some species of apple trees bear thornlike twigs that make them valuable as protective cover for birds. Forty-four kinds of birds are known to feed on apples, including the red-headed woodpecker, red-shafted flicker, Lewis's woodpecker, robin, meadowlark, red-eyed towhee, tufted titmouse, downy woodpecker, Bohemian waxwing, hairy woodpecker, and bluebird. If apples are planted for their fruit only and not as avian attractants, measures should be taken to protect them from birds.

Species utilized: M. angustifolia, M. coronaria, and M. fusca (= M. diversifolia).

Aralia, Sarsaparilla, Spikenard

According to stomach analyses the aralias (Aralia: Araliaceae) are utilized as food by a number of attractive birds. The spiny leaves and stems also provide good cover. Included in the 18 kinds of birds that feed on this plant are the white-breasted nuthatch, olive-backed thrush, pine grosbeak, meadowlark, red-bellied woodpecker, hermit thrush, gray-cheeked thrush, swamp sparrow, and catbird.

Species utilized: A. hispida, A. nudicaulis, A. racemosa, and A. spinosa.

^{1/} The following contributions of the Biological Survey to publications of the U. S. Department of Agriculture give information on the control of troublesome species: "The Crow in its Relation to Agriculture" (Farmers' Bull. 1102); "English Sparrow Control" (Leaflet Bi-61); "Methods for Eradicating Objectional Roosts of Birds" (Leaflet Bi-489); "Suggestions for Controlling Starling Roosts" (Wildlife Leaflet BS-81); "Two Home-Made Traps for English Sparrows" (Wildlife Leaflet BS-121); and "Suggestions for the Control of Vagrant Domestic Pigeons" (Wildlife Leaflet BS-143).

Arborvitae

The evergreen arborvitae (Thuja: Pinaceae) is apparently not extensively used by birds as food, but it may, of course, be used to good advantage as protective cover. Only three birds, the olive-backed thrush, pine grosbeak, and red-eyed towhee, feed on the American arborvitae or white cedar (T. occidentalis).

Barberry

Although barberries (Berberis: Berberidaceae) are not utilized as food by birds to so great an extent as many other plants, they are probably of greater potential value than stomach records would indicate. The common barberry (B. vulgaris) can be grown in certain sections of the United States without danger to wheat, but it is usually not a desirable ornamental plant as it is one of the hosts of wheat rust (Puccinia graminis), which each year causes enormous losses in wheat production. In fact, it is advisable to confine planting to the Japanese barberry (B. thunbergii) and its hybrids. Forming low dense hedges, it is obviously useful to birds seeking protection and food. Eleven kinds of birds feed on it, of which four, the cedar waxwing, catbird, robin, and hairy woodpecker, are very desirable.

Species utilized: B. aquifolium, B. haematocarpa, B. japonica, B. thunbergii, B. trifoliata, and B. vulgaris.

Bayberry

Bayberry or waxmyrtle (Myrica: Myricaceae) is frequently taken by a great number of birds. The bushes have good ornamental value and although native to sandy coastal situations they are quite adaptable to other regions. Stomach records indicate that 86 species of birds, including the red-bellied woodpecker, tree swallow, downy woodpecker, meadowlark, white-eyed vireo, bluebird, brown thrasher, catbird, phoebe, Carolina wren, black-capped chickadee, hermit thrush, mockingbird, flicker, Carolina chickadee, robin, blue-headed vireo, red-eyed vireo and wrenit have eaten the wax-covered fruits of this plant.

Species utilized: M. californica, M. carolinensis, M. cerifera, and M. gale.

Bearberry, Manzanita

The fruit of the decorative bearberry (Arctostaphylos: Ericaceae) attracts at least 34 species of birds, including the following: fox sparrow, wrenit, Harris's sparrow, evening grosbeak, mockingbird, and California thrasher.

Species utilized: A. alpina, A. manzanita, A. nevadensis, and A. uva-ursi.

Beautyberry, French Mulberry

The general decorative value of the beautyberry or French mulberry (Callicarpa: Verbenaceae), together with its qualities as an attractant for birds makes it worth planting in many parts of the country. The colorful berries, which remain edible through the winter, are taken by 11 kinds of birds, especially the brown thrasher and mockingbird, and including also the catbird, red-eyed towhee, cardinal, red-eyed vireo, wood thrush, and hermit thrush.

Species utilized: C. americana and C. purpurea.

Beech

Members of the woodpecker family, in particular, find the nuts of beech (Fagus: Fagaceae) trees palatable. Of nine species of birds that feed on this plant four are woodpeckers.

Species utilized: F. grandifolia (= F. americana).

Birch

The redpoll, more than any other bird, finds birch (Betula: Betulaceae) achenes very tasty. Among the 30 species of birds using this plant as food, the pine siskin, chickadee, tree sparrow, fox sparrow, goldfinch and slate-colored junco also take it to some extent.

Species utilized: B. fontinalis, B. glandulosa, B. kenaica, B. lenta, B. lutea, B. nana, B. nigra, B. papyrifera (= B. alba), B. populifolia, and B. pumila.

Bittersweet

Shrubby bittersweet (Celastrus: Celastraceae), or staff tree, as it is sometimes called, bears brilliantly colored globular pods that remain through the winter and attract at least eight kinds of birds, including the bluebird, robin, red-eyed vireo, and hermit thrush.

Species utilized: C. scandens.

Blueberry, Cranberry

Blueberries or cranberries (Vaccinium: Ericaceae) rank high in the list of food plants utilized, 9 species having been taken by 93 kinds of birds. Among those feeding on the fruits are the red-eyed towhee, robin, catbird, brown thrasher, kingbird, hermit thrush, bluebird, black-capped chickadee, tree sparrow, tufted titmouse, pine grosbeak, cardinal, flicker, wood thrush, veery, and a number of sparrows.

Species utilized: V. arboreum, V. canadense, V. corymbosum, V. delioides, V. macrocarpon, V. oreophilum, V. ovatum, V. oxycoccos, V. pennsylvanicum (= V. angustifolium), V. stamineum, V. uliginosum, V. vacillans, V. virgatum, and V. vitis-idaea.

Because of its ornamental character and its attracting qualities for various birds, Vaccinium should be included in a planting program.

Buckthorn

When planted in hedges or in groups, buckthorn (Rhamnus - Rhamnaceae) is especially valuable for cover. Since buckthorns are carriers of the crown rust (Fuccinia coronata) of oats, their planting is not recommended for farming sections. Of the 18 birds that eat the berrylike fruits, which are available in autumn and early in winter, the following show preference for the plant: Catbird, brown thrasher, pileated woodpecker, kingbird, California thrasher, olive-backed thrush, phainopepla, and wren-tit.

Species utilized: R. alnifolia, R. californica, R. caroliniana, R. cathartica, R. lanceolata, and R. purshiana.

Buffaloberry

Buffaloberry (Shepherdia: Elaeagnaceae) is particularly ornamental and of most value to birds when planted in front of shrubbery masses. Nineteen birds, including the catbird, hermit thrush, brown thrasher, pine grosbeak, and some of the woodpeckers, are fond of its fruits.

Species utilized: S. argentea and S. canadensis.

Chokeberry

The berries of this ornamental deciduous shrub, the chokeberry (Aronia: Rosaceae), are preferred during fall and winter by 19 species of birds, including the meadowlark, brown thrasher, catbird, hermit thrush, black-capped chickadee, cedar waxwing, downy woodpecker, scarlet tanager, red-eyed towhee, kingbird, and red-eyed vireo.

Species utilized: A. arbutifolia, A. atropurpurea, and A. melanocarpa.

Crowberry

Records show that 42 kinds of birds feed on the berrylike drupes of the crowberry (Empetrum nigrum: Empetraceae). The pine grosbeak especially is fond of the fruit, and other species, as the snow bunting, tree sparrow, and Harris's sparrow are also fairly important as consumers of crowberries.

Dogwood

The attractive fruits of the ornamental dogwoods (Cornus: Cornaceae), which persist through the winter, possess great value as a bird attractant. As would be expected, a common plant, which bears beautiful flowers in many species and attractive and edible berries in most, attracts scores of birds. No less than 38 kinds of birds have been found to feed on dogwood, including such well-liked songsters as the robin, evening grosbeak, cardinal, pine grosbeak, bluebird, hermit thrush, red-eyed vireo, flicker, kingbird, downy

woodpecker, warbling vireo, catbird, olive-backed thrush, brown thrasher, gray-cheeked thrush, hairy woodpecker, veery, wood thrush, red-bellied woodpecker, red-headed woodpecker, mockingbird, cedar waxwing, crested flycatcher, red-eyed towhee, pileated woodpecker, tree swallow, and Philadelphia vireo. With such an array of desirable birds as potential visitors, one should not neglect including several kinds of dogwoods in planting the home grounds.

Species utilized: C. alterniflora, C. amomum, C. asperifolia, C. baileyi, C. canadensis, C. candidissima, C. circinata, C. florida, C. nuttallii, C. occidentalis, C. paniculata, C. rugosa, C. stolonifera, and C. suecica.

Elderberry

In the number of species of birds that feed on it, the elderberry (Sambucus: Caprifoliaceae) ranks second only to Rubus; 120 kinds of birds are definitely recorded as having eaten the berries of at least 5 species of elderberry, and there are probably many more for which data are not available. Prominent among these birds are the catbird, common house finch, California towhee, olive-backed thrush, brown thrasher, eastern and western bluebirds, black-headed grosbeak, phainopepla, wrenit, mockingbird, kingbird, black phoebe, rose-breasted grosbeak, red-headed woodpecker, robin, flicker, white-crowned sparrow, pileated woodpecker, Arkansas kingbird, red-eyed vireo, white-throated sparrow, California thrasher, Lewis's woodpecker, northern cactus wren, veery, hermit thrush, song sparrow, cardinal, warbling vireo, and many others. Elderberry plants are well adapted for mass planting, and provide cover as well as food for birds.

Species utilized: S. callicarpa, S. canadensis, S. caerulea (= S. glauca and S. vestita), and S. racemosa (= S. pubens).

Elm

Nine species of birds, including the pine siskin and purple finch, feed upon the elm (Ulmus: Urticaceae). These stately trees are utilized as nesting sites by many species of birds, and in spring their buds are often eaten as food.

Species utilized: U. americana.

Euonymus, Burningbush

The beautiful capsular fruits of the decorative euonymus, or burningbush (Euonymus: Celastraceae), which persist through the greater part of winter, are taken by a few birds; the plant also provides good protective cover. Of the eight kinds of birds feeding on it, the robin, hermit thrush, scarlet tanager, bluebird, and flicker, are most important.

Species utilized: E. americanus, E. atropurpureus, and E. occidentalis.

Fir

Fir (Abies: Pinaceae) cones and needles, present through winter, are attractive to 13 species of birds. The cones, which should be especially sought for by crossbills, as the bills of these birds are peculiarly adapted for extracting the seeds, are probably used as food more than stomach records would indicate. The Hudsonian and mountain chickadees and white-winged crossbill seem fond of fir trees. The dignity and stateliness of these large evergreens add much to the beauty of the grounds if the trees are so planted that they are displayed to best advantage, either as single specimens or in groups of two or three properly spaced. In addition, they provide splendid cover.

Species utilized: A. balsamea, A. concolor, and A. lasiocarpa.

Grape

Grapes (Vitis: Vitaceae) are taken by many birds, records indicating that at least 9 species are eaten by 89 kinds of birds. The cardinal seems fondest of the pulpy fruit, but many others, including the robin, flicker, red-headed woodpecker, red-shafted flicker, red-bellied woodpecker, brown thrasher, catbird, western bluebird, mockingbird, eastern kingbird, Cassin's kingbird, pileated woodpecker, gray-cheeked thrush, olive-backed thrush, fox sparrow, and red-eyed towhee, also show a distinct liking for it. Because of its dense foliage and tendency to climb and spread, Vitis offers unusually good cover for small birds. A grape arbor should be an asset to any lawn or yard.

Species utilized: V. aestivalis, V. arizonica, V. bicolor, V. californica, V. cordifolia, V. labrusca, V. rotundifolia, V. vinifera, and V. vulpina.

Hackberry

The small colored hackberries (Celtis: Urticaceae), which persist until early in spring, are an important winter food for birds. The trees afford excellent cover since they grow to a good height and have spreading branches. Forty-eight kinds of birds, headed by the robin and mockingbird, feed, many of them extensively, on this plant. Other species include the flicker, cardinal, bluebird, brown thrasher, hermit thrush, scissor-tailed flycatcher, red-eyed towhee, phoebe, red-bellied woodpecker, golden-fronted woodpecker, and olive-backed thrush.

Species utilized: C. douglasii, C. mississippiensis, C. occidentalis, C. pallida, and C. reticulata.

Hawthorn

The attractive fruits of hawthorn (Crataegus: Rosaceae), which last through the winter, are taken by 39 species of birds, particularly by the pine grosbeak and robin, and also by the fox sparrow, Lewis's woodpecker, rose-breasted grosbeak, black-headed grosbeak, cedar waxwing, hermit thrush, cardinal, bluebird, and Arkansas kingbird. The plants, because of their spurs or spines, should also afford excellent protective cover for birds.

Species utilized: C. columbiana, C. crussalli, C. douglasii, C. irrasa, C. oxyacantha, C. rivularis, and C. viridis. C. tomentosa is not recommended as it is a host for the apple rust (Gymnosporangium clavariaeforme).

Hemlock

With proper pruning the common hemlock (Tsuga: Pinaceae) will produce dense foliage, and will thus be excellent for hedges and as cover for birds. The pine siskin finds the seeds of this plant much to its liking, and the white-winged and red crossbills, black-capped chickadee, and flicker are also recorded as feeding on them.

Species utilized: T. canadensis, T. heterophylla, and T. mertensiana.

Holly

Holly (Ilex: Aquifoliaceae) is unquestionably one of our most beautiful woody plants and its usually bright red berries are utilized as food to a large extent by 49 of our most desirable birds. It is especially attractive to the mockingbird, robin, hermit thrush, and bluebird, and it is also liked by the brown thrasher, catbird, flicker, red-bellied woodpecker, red-eyed towhee, olive-backed thrush, pileated woodpecker, and cardinal. In addition to the decorative, evergreen varieties of holly, there are several deciduous species that are attractive in winter because of their ornamental fruits.

Species utilized: I. broxensis, I. cassine, I. decidua, I. glabra, I. monticola, I. opaca, I. verticillata, and I. vomitoria.

Honeysuckle

Because most of the honeysuckles (Lonicera: Caprifoliaceae) are hardy and easily cultivated, and have a delicate beauty and are attractive to birds, they are among the most popular of the ornamental shrubs. The bush types may be employed as cover either in hedge formation or solitary; the vinelike Japanese honeysuckle is useful as a screen for fences and banks and is a valued winter food for birds. Though of Asiatic origin, it has become very well-established in this country, especially in the South. Twenty kinds of birds feed on honeysuckles, including the pine grosbeak, olive-backed thrush, catbird, hermit thrush, varied thrush, robin, cedar waxwing, mockingbird, spurred towhee, and red-eyed vireo.

Species utilized: L. ciliosa, L. glaucescens, L. hirsuta, L. involucrata, and L. japonica.

Huckleberry

Forty-eight species of birds are known to feed upon the huckleberry (Gaylussacia: Ericaceae), noticeably the red-eyed towhee and pine grosbeak. This is not surprising since the fruit is attractive and appetizing. Other birds fond of these berries are the flicker, catbird, hermit thrush, scarlet tanager, bluebird, robin, kingbird, brown thrasher, crested flycatcher, and mockingbird.

Species utilized: G. baccata (= G. resinosa), G. frondosa, and G. nana.

Juniper

As would be expected, junipers (Juniperus: Pinaceae) attract a great variety of birds, as many as 54 kinds having been recorded, some of the more important of which are the robin, cedar waxwing, bluebird, evening grosbeak, mockingbird, flicker, hermit thrush, myrtle warbler, yellow-bellied flycatcher, tree swallow, phoebe, cardinal, kingbird, olive-backed thrush, and cliff swallow. Like most members of the pine family, the evergreen junipers provide excellent cover during winter. They are not recommended for planting near orchards, however, as they are carriers of apple rust (Gymnosporangium spp.)

Species utilized: J. communis, J. horizontalis, J. monosperma, J. scopularum, J. utahensis, and J. virginiana.

Larch

The fruit of the larch or tamarack (Larix: Pinaceae) is a catkin and its seeds are taken by the red crossbill and pine siskin. Though these trees are deciduous, they are popular as ornamentals, particularly in the North.

Species utilized: L. laricina.

Maple

The evening and pine grosbeaks feed to a considerable extent upon the seeds of maples (Acer: Aceraceae), which are available most of the year. In arid sections of the country the boxelder is largely used for ornamental purposes, and in the South a variety of the black maple is favored. The Norway and sugar maples are popular in the North as shade trees. The silver maple, the earliest to mature, is often planted, but it drops its branches freely and may, therefore, be unsuitable on or near lawns.

Species utilized: A. circinatum, A. negundo, A. nigrum, A. pennsylvanicum, A. rubrum, A. saccharinum, A. saccharum, and A. spicatum.

Mountain-ash

The name "ash" is a misnomer, as the mountain-ash (Sorbus: Rosaceae) does not resemble the true ash (Fraxinus). Its clusters of orange-colored fruits are attractive to both man and birds, and it makes good cover if planted among tall evergreens. The pine and evening grosbeaks head the list of birds feeding on Sorbus, but the robin, catbird, and scarlet tanager are also fond of it.

Species utilized: S. americana, S. aucuparia, and S. sitchensis.

Mulberry

Mulberries (Morus: Urticaceae) are one of the favorite fruits of many of our native song and insectivorous birds during the short fruiting period in spring or early in summer. Records show that they are relished by 44 species, including the robin, cardinal, catbird, red-headed woodpecker, kingbird, cedar waxwing, and red-bellied woodpecker, as well as by the wood thrush, mockingbird, brown thrasher, crested flycatcher, rose-breasted grosbeak, hairy woodpecker, and tufted titmouse. To prevent depredations to more valuable fruits by recently returned spring migrants, it is frequently considered advisable to grow mulberries as birds often prefer these to other cultivated fruits.

Species utilized: M. alba and M. rubra.

Oak

Because oak trees are producers of great quantities of mast, they are a food source for many birds. In all, 62 kinds of birds have fed on it, especially the brown thrasher, red-eyed towhee, and most of the woodpeckers, and also the white-breasted nuthatch, rose-breasted grosbeak, meadowlark, San Diego towhee, spurred towhee, cardinal, chickadee, Carolina wren, and varied thrush. Oaks also furnish nesting sites for birds.

Species utilized: Q. agrifolia, Q. alba, Q. bicolor, Q. borealis maxima (= Q. rubra), Q. coccinea, Q. emoryi, Q. gambelii, Q. garryana, Q. hypoleuca, Q. ilicifolia, Q. laurifolia, Q. lobata, Q. lyrata, Q. macrocarpa, Q. marilandica, Q. nigra, Q. palustris, Q. phellos, Q. pumila, Q. turbinella, Q. undulata, Q. velutina, and Q. virginiana.

Partridgeberry

Partridgeberry (Mitchella: Rubiaceae), also called twinberry or squawberry, bears persistent berries which are taken to some degree by certain of our common birds. Included in the 10 kinds recorded as eating this plant are the catbird, bluebird, brown thrasher, and robin. As partridgeberry is particularly effective as a ground cover for rock gardens or under trees, it should be a good food source for ground-feeding birds.

Species utilized: M. repens.

Pepper tree

Only one species of the pepper tree (Schinus: Anacardiaceae) is commonly cultivated in the United States. Found only in southern regions, it is abundant in southern California and common in Florida. The 11 species of birds feeding on the fruits of this beautiful tree include the robin, cedar waxwing, hermit thrush, olive-backed thrush, mockingbird, and western bluebird.

Species utilized: S. molle.

Persimmon

The robin feeds on the persimmon (Diospyros: Ebenaceae) far more than any of our other birds. The five other birds that feed on this plant include the phoebe, bluebird, and pileated woodpecker. The persimmon tree is attractive even after the leaves have fallen because of its many brightly colored fruits, which are available as food during the entire winter.

Species utilized: D. virginiana.

Pine

Not only are the pines beautiful but they also provide a source of food for many of our feathered friends, and in addition they supply excellent protective cover. Sixty-three species of birds feed on pine seeds, especially the red crossbill and pine grosbeak, as well as the meadow-lark, pine siskin, white-winged crossbill, Carolina chickadee, evening grosbeak, red-cockaded woodpecker, white-headed woodpecker, red-bellied woodpecker, Carolina wren, Lewis's woodpecker, brown thrasher, brown-headed nuthatch, and black-capped chickadee. Probably any species of Pinus would likely be of some value to birds.

Species utilized: P. austriaca, P. banksiana, P. caribaea (= P. heterophylla), P. contorta, P. echinata, P. edulis, P. flexilis, P. glabra, P. jeffreyi, P. leonophylla (= P. chinahuana), P. palustris, P. ponderosa, P. radiata, P. resinosa, P. rigida, P. serotina, P. strobus, P. taeda, and P. virginiana.

Plum, Cherry, Apricot

The fruits of plums, cherries, and apricots (Prunus: Rosaceae) are without doubt favored by a large number of birds, having been found in the stomachs of 84 species. The robin is especially fond of them, records showing that these fruits occur more often in the stomach contents of this bird than in those of any other. Other popular birds that eat these fruits are the catbird, cedar waxwing, red-headed woodpecker, olive-backed thrush, brown thrasher, black-headed grosbeak, flicker, kingbird, evening grosbeak, western tanager, house finch, bluebird, wood thrush, gray-cheeked thrush, mockingbird, Lewis's woodpecker, crested flycatcher, and California towhee. Wild varieties of Prunus may be planted to serve as an attraction for birds to prevent depredations upon cultivated fruits. The wild black or rum cherry (P. serotina) is a good counter-attractant for grapes, and the chokecherry (P. virginiana) is especially well-liked by many birds. Wild plums make useful thick t shelters. Several species of Prunus should without question be included in a planting program to attract birds. Since some of the plants of this genus are poisonous to livestock, they are not recommended for farming sections if the animals are allowed to roam unrestricted.

Species utilized: P. americana, P. armeniaca, P. avium, P. cerasus, P. cuneata (= P. susquehannae), P. demissa (= P. melanocarpa), P. domestica, P. emarginata (= P. frantibolia), P. maritima, P. pennsylvanica, P. persica, P. serotina, and P. virginiana.

Poplar, Aspen

Stomach records indicate that the fruits of the poplar (Populus: Salicaceae) are utilized as food by 12 species of birds, including the pine and rose-breasted grosbeaks. As ornamentals, these tall, graceful trees lend dignity and charm to the home grounds.

Species utilized: P. balsamifera, P. grandidentata, P. heterophylla, P. sargentii (= P. deltoides occidentalis), P. tremuloides, and P. trichocarpa.

Raspberry, Blackberry

The raspberry and blackberry (Rubus: Rosaceae) far outnumber all others in the number of species of birds that feed on them. Stomach records indicate that 149 kinds of birds utilize the fruits or seeds as food. They are taken by the pine grosbeak, catbird, red-eyed towhee, brown thrasher, kingbird, olive-backed thrush, cardinal, robin, red-headed woodpecker, song sparrow, mockingbird, fox sparrow, eastern bluebird, California towhee, flicker, black-headed grosbeak, spurred towhee, rose-breasted grosbeak, wood thrush, white-throated sparrow, wrentit, meadowlark, cedar waxwing, red-eyed vireo, California thrasher, tufted titmouse, common house finch, slate-colored junco, scarlet tanager, veery, and many others. The plants of this genus, often called brambles, always furnish good cover for birds.

Species utilized: R. arcticus, R. canadensis, R. chamaemorus, R. cuneifolius, R. deliciosus, R. hispidus, R. leucodermis, R. macropetalus, R. occidentalis, R. odoratus, R. spectabilis, R. strigosus, and R. villosus.

Rose

It is almost unnecessary to discuss the rose (Rosa: Rosaceae) as its cultivation is so widespread. It is not commonly known, however, that rose hips are quite extensively taken by birds, and that many of the smaller birds are fond of the achenes. Because of the great variety of species, some of them quite large and ornamental, the fruits of the rose are available most of the year. In many species the thorns render rosebushes good protective cover. Forty-two kinds of birds feed on the rose, including the Philadelphia vireo, red-eyed vireo, bluebird, cardinal, hermit thrush, wood thrush, olive-backed thrush, black-capped chickadee, and painted bunting.

Species utilized: R. acicularis, R. arkansana, R. humilis (= R. carolina) R. nutkana, R. palustris, R. sayi, and R. virginiana.

Russian Olive, Silverberry

The Russian olive (Elaeagnus: Elaeagnaceae) has decorative value and is also a food source for 15 species of birds including the evening grosbeak, robin, Shufeldt's junco, white-crowned sparrow, Gambel's sparrow,

green-tailed towhee, Arkansas goldfinch, cedar waxwing, brown thrasher, spurred towhee, song sparrow, and red-shafted flicker.

Species utilized: E. angustifolia.

Sassafras

The sassafras tree (Sassafras: Lauraceae), primarily southern in habitat, is cultivated principally for its ornamental value, but it is recorded as attractive to 19 species of birds, especially the kingbird and catbird, as well as the red-eyed vireo, pileated woodpecker, white-eyed vireo, crested flycatcher, bluebird, phoebe, and hermit thrush. Its fruits are available during most of the year.

Species utilized: S. officinale.

Serviceberry, Shadbush, Juneberry

Serviceberry (Amelanchier: Rosaceae) is fed upon by many familiar birds. One of its chief values is that its berries appear early in summer, thus providing food for birds before other fruits have developed, and persist in many species until early in autumn. The name serviceberry is therefore truly appropriate as this plant renders a great service to birds in providing a constant source of food in summer. It is of particular value when planted in mass formation as it then offers good cover and nesting sites for many birds. The 42 kinds of birds known to partake of these berries include such desirable species as the catbird, robin, veery, cedar waxwing, hermit thrush, red-headed woodpecker, flicker, downy woodpecker, rose-breasted grosbeak, olive-backed thrush, brown thrasher, and kingbird.

Species utilized: A. alnifolia, A. canadensis, and A. florida.

Snowberry

Records indicate that the pine grosbeak eats the fruit of the snowberry (Symphoricarpos: Caprifoliaceae) more frequently than any other of 36 kinds of birds that relish this plant. Other species fond of this plant are the evening grosbeak, robin, wrenit, spurred towhee, brown thrasher, olive-backed thrush, veery, hermit thrush, phoebe, and warbling vireo. Among the main attractions of this plant are the beautiful berries that in some species appear as early as July and in many forms persist until late in winter. Planted in masses in shrubby borders, snowberry possesses excellent cover qualities.

Species utilized: S. albus (= S. mollis and S. racemosus), S. occidentalis, S. orbiculatus, and S. rotundifolius.

Sour Gum, Tupelo, Black Gum

Woodpeckers seem to be more fond of sour gum (Nyssa: Cornaceae) than any other species of bird, the flicker, pileated woodpecker, and

red-bellied woodpecker heading the list of 40 kinds that feed on this plant. Others attracted by it are the mockingbird, brown thrasher, bluebird, catbird, cedar waxwing, red-headed woodpecker, robin, gray-cheeked thrush, and hermit thrush. The brightly colored leaves of the sour gums are particularly lovely in the autumn.

Species utilized: N. aquatica, N. biflora, and N. sylvatica.

Spicebush

Seventeen desirable species of birds find the brightly colored fruits of the spicebush (Benzoin: Lauraceae) to their liking. The kingbird, wood thrush, red-eyed vireo, catbird, flicker, veery, cardinal, and robin among others are fond of the berries, which persist into early winter. They may possibly be attracted also by the showy, aromatic foliage.

Species utilized: B. aestivale.

Spruce

As the fruits of the spruce (Picea: Pinaceae) are cones, it is not surprising that the white-winged crossbill heads the list of 31 birds that utilize this plant as food, and among which are the red crossbill, pine grosbeak, hairy woodpecker, downy woodpecker, pileated woodpecker, wood thrush, olive-backed thrush, black-capped chickadee, and olive-sided flycatcher. The dense foliage and hardy habit of the spruce make it useful as a retreat for birds whether planted singly or in hedge or windbreak form.

Species utilized: P. canadensis (= P. alba), P. engelmanni, P. mariana, and P. sitchensis.

Sumac

Sumac (Rhus: Anacardiaceae) is an important food source for many birds, records indicating that 57 kinds have taken the nonpoisonous varieties; inclusion of the toxic species increases the number to 98. The list includes the bluebird, robin, hermit thrush, flicker, wrenit, phoebe, red-headed woodpecker, mockingbird, catbird, brown thrasher, olive-backed thrush, veery, red-shafted flicker, red-bellied woodpecker, Carolina chickadee, cardinal, red-eyed vireo, and others. Many of the sumacs, with their attractive foliage and decorative berries, are good for mass planting and serve to beautify the home grounds and provide food and cover for birds. The fruits persist through winter into spring, thus providing a sustained food supply. Poisonous species of sumac (now generally placed in the genus Toxicodendron) should, for obvious reasons, not be planted in spite of their ornamental character and their value as a food source and haven for birds.

Species utilized: R. aromatica (= R. canadensis in part), R. copallina, R. glabra, R. integrifolia, R. laurina, R. trilobata (= R. emoryii), and R. typhina (= R. hirta).

Supplejack

Supplejack (Berchemia: Rhamnaceae), which is more hardy in the South than in the North, is a fine climbing plant for trellises. Moreover, its berrylike fruits attract 16 kinds of birds, important among which are the robin, mockingbird, hermit thrush, brown thrasher, and horned lark.

Species utilized: B. scandens.

Viburnum

Every well-planted lawn should support a number of our attractive viburnums (Viburnum: Caprifoliaceae), for they will not only add beauty to the premises but will also encourage desirable bird species to visit them. Some of the viburnums produce fruits that remain on the bush from late July until the following spring. The familiar snowball (V. opulus sterile) does not bear fruit, and its leaves are severely attacked by aphids, with the result that they curl up and become unsightly. Fortunately, however, this lovely shrub may be replaced with the equally attractive Japanese snowball (V. tomentosum = V. plicatum), which is not attacked by aphids and which bears decorative fruits. Thirty-five species of birds utilize viburnums as food, the leading ones being the robin, pine grosbeak, redpoll, hermit thrush, catbird, cedar waxwing, brown thrasher, olive-backed thrush, red-eyed vireo, gray-checked thrush, cardinal, California thrasher, and bluebird.

Species utilized: V. acerifolium, V. alnifolium, V. cassinoides, V. dentatum, V. ellipticum, V. lantana, V. lentago, V. molle, V. nudum, V. opulus (= V. trilobum), V. parviflorum, V. pauciflorum, V. prunifolium, and V. pubescens.

Virginia Creeper, Woodbine

Virginia creeper or woodbine (Parthenocissus ^{1/}: Vitaceae), one of our best woody climbers, not only is ornamental, particularly when its leaves turn color in the fall, but also provides food for birds, and affords shelter and sites for nesting. Its berries are taken more or less frequently by 39 species of birds, especially by the mockingbird, bluebird, flicker, robin, brown thrasher, red-eyed vireo, hermit thrush, red-bellied woodpecker, olive-backed thrush, catbird, and pileated woodpecker.

Species utilized: P. quinquefolia.

Willow

These decorative trees or shrubs (Salix: Salicaceae) are used as food by 20 kinds of birds, particularly by the pine grosbeak, and also by the redpoll and green-backed goldfinch. Both the leaves and the catkins are edible. The chief value of the trees, however, is in their use as nesting sites for birds.

^{1/} Parthenocissus = Pseodera, and Amelopsis in part.

Species utilized: S. candida, S. discolor, S. glauca, S. nigra, S. petrophila, and S. tristis.

Wintergreen

Eleven species of birds seem to favor the berries of wintergreen (Gaultheria: Ericaceae). Its beauty and its value as a source of food for birds make this prostrate, evergreen vine or shrub well worth planting. In borders it provides good protective cover for small birds. The wren tit, brown thrasher, rose-breasted grosbeak, and hermit thrush are among the desirable birds that feed on it.

Species utilized: G. procumbens and G. shallon.

Yew

Although there are records of only three birds, including the veery and wood thrush, that eat the seeds of yew (Taxus: Taxaceae), the plant has high ornamental value. What food value it may have is, at any rate, supplemented by its worth as protective cover for birds. Since yew is poisonous to livestock, its planting in farming sections is not recommended.

Species utilized: T. canadensis.